

REMARKS

I. Summary of the Office Action

Claims 1-95 are pending in this application.

Claims 19, 20, 31, 32, 47-58 and 92-95 are withdrawn from further consideration pursuant to 37 C.F.R. § 1.142(b) as being drawn to a nonelected species.

Claims 1-5, 8-18, 23-30, 37-40, 44, 59-64, and 68-91 are rejected under 35 U.S.C. § 102(b) as being anticipated by Solem et al. U.S. Patent Publication No. 2001/0018611 (hereinafter "Solem").

Claims 21, 22, 33-36, 45, and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Solem in view of Tremulis et al. U.S. Patent No. 7,101,395 (hereinafter "Tremulis"). Claims 6, 7, 41-43, and 65-67 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Solem in view of Alferness et al. U.S. Patent No. 6,908,478 (hereinafter "Alferness").

II. Amendments to the Claims

Applicants have amended claims 1, 23, 33, 35, and 44-46, 48, 50, 51, 54, 56, and 58 to more particularly define the invention and claims 57 and 80 to correct typographical errors. Claims 19, 21, 31, and 92-95 have been cancelled without prejudice. The amendments do not add any new matter.

III. Applicants' Reply to the Rejections of Claims 1-18, 21-30, 33-46, and 59-75

Claims 1-5, 8-18, 23-30, 37-40, 44, 59-64, and 68-75 are rejected under 35 U.S.C. § 102(b) as being anticipated by Solem. Claims 21, 22, 33-36, 45, and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Solem in view of

Tremulis. Claims 6, 7, 41-43, and 65-67 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Solem in view of Alferness. The Examiner's rejections are respectfully traversed.

Independent claims 1 and 23 relate to a method and apparatus for shortening a portion of the perimeter of a patient's mitral heart valve. Independent claim 44 relates to apparatus for remodeling relatively soft body tissue of a patient. The Examiner rejected independent claims 1, 23, and 44 as being anticipated by Solem. Applicants have amended independent claims 1, 23, and 44 to each specify that the first anchor structure comprises a helical structure. The helical structure feature appeared, for example, in original dependent claim 45. Dependent claim 45 was rejected as being obvious over Solem in view of Tremulis. Because applicants have added the helical structure feature into independent claims 1, 23, and 44, applicants will address the rejections of claim 1, 23, and 44 as being over Solem in view of Tremulis.

Solem describes a device for treating mitral annulus dilation using a device that includes a stent-like structure or structures that are enlargeable to abut against the side walls of the coronary sinus. The stent-like structures include hooks that dig into and engage the wall of the coronary sinus. The Examiner concedes that Solem does not disclose an anchor structure that comprises a helical structure.

Tremulis is directed to methods and apparatus for connecting tissue. In one embodiment, Tremulis discusses securing a "helix" to tissue by torqueing the helix through the tissue (see col. 15, lines 55-59).

The Examiner contends that it would have been obvious to use the helix anchors of Tremulis with Solem because they "would provide a greater anchoring force allowing for a more

secure device" citing to the discussion on column 15, lines 65-67 of Tremulis. Contrary to the Examiner's contention, nothing in Tremulis would lead one skilled in the art to believe that Tremulis' helix anchors would be more secure than Solem's anchors. The discussion in Tremulis is being taken out of context. The discussion is directed to comparing different types of helix anchors. Tremulis states that the helix anchor shown in FIG. 69, which is of varying radii and has suture material attached to its distal end, provides "additional anchoring force." Tremulis, therefore, is teaching a way to modify a simple helix of constant radii such as one shown in FIG. 67 to achieve additional anchoring force.

Accordingly, one skilled in the art would not look to the Tremulis' modified helix anchor to modify Solem's anchors. Solem's anchors are multiple hooks attached to stent-like structures. The stent-like structures expand to annularly abut against the side wall of the coronary sinus and the attached hooks dig into the side wall (see paragraph 50 of Solem). Nothing in Tremulis would suggest to one skilled in the art that a helix type anchor would provide a greater anchoring force than Solem's hooks attached to the stent-like structures.

Moreover, Tremulis' helix anchors are secured to tissue by being torqued or screwed into the tissue. It is unclear how one skilled in the art would even incorporate Tremulis' helix anchors with Solem's stent-like structures. Solem's stent-like structures expand into place within the coronary sinus. Such expansion would not cause a helix to be torqued into the side wall of the coronary sinus.

In view of the foregoing, applicants respectfully submit that it would not be obvious for one skilled in the art to modify Solem's device to include Tremulis' helix anchors. For at least this reason, applicants respectfully request that

the rejections of independent claims 1, 23, and 44, and dependent claims 2-18, 21, 22, 24-30, 33-43, 45, 46, and 59-75 be withdrawn.

IV. Applicants' Reply to the Rejections of Claims 76-91

Claims 76-91 are rejected under 35 U.S.C. § 102(b) as being anticipated by Solem. The Examiner's rejections are respectfully traversed.

Independent claims 76, 79, 81, 85, and 89 relate to apparatus and methods that specify various instrumentation. The Examiner rejects these claims as being anticipated by Solem. Solem refers to using catheter based technology in connection with positioning and releasing the stent-like structures in the coronary sinus (see, e.g., paragraphs 13, 26, and 47-51). Solem, however, fails to show or suggest all of the feature of applicants' independent claims 76, 79, 81, 85, and 89. Specifically, Solem fails to show or suggest at least the following:

- second instrumentation for implanting a second anchor structure in the patient's right atrium as specified by independent claim 76
- inserting delivery instrumentation so that the lateral curvature of the delivery instrumentation causes the delivery instrumentation to angularly orient itself relative to the body tissue conduit to superimpose the lateral curvature of the delivery instrumentation and the body tissue conduit on one another as specified by independent claim 79
- delivery instrumentation being adapted to deliver the structure into the conduit with a predetermined angular orientation about a longitudinal axis of the delivery instrumentation as specified by independent claim 81
- instrumentation having lateral curvature corresponding to the lateral curvature of the conduit so that the instrumentation tends to orient itself angularly about its longitudinal axis with its curvature substantially

following the curvature of the conduit as specified by independent claim 85

- first and second instrumentation for implanting first and second anchor structures at locations in a patient's left ventricle as specified by independent claim 89

For at least the foregoing reasons, applicants respectfully request that the rejections of independent claims 76, 79, 81, 85, and 89 and dependent claims 77, 78, 82-84, 86-88, 90, and 91 be withdrawn.

V. Claims 19, 20, 31, 32, 47-58 and 92-95

Claims 19, 20, 31, 32, and 47-58 were withdrawn from further consideration pursuant to 37 C.F.R. § 1.142(b) as being drawn to a nonelected species. Applicants submit that independent claims 1, 23, and 44 are allowable generic claims. Accordingly, applicants request consideration of dependent claims 19, 20, 31, 32, and 47-58 because they depend from allowable independent generic claims.

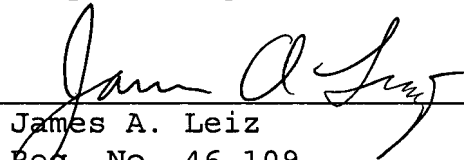
Claims 92-95 were also withdrawn from further consideration pursuant to 37 C.F.R. § 1.142(b) as being drawn to a nonelected species. Applicants have cancelled claim 92-95 without prejudice.

VI. Conclusion

For at least the foregoing reasons, applicants respectfully submit that this application is in condition for allowance.

Accordingly, prompt reconsideration and allowance of this application are respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "James A. Leiz", is written over a horizontal line.

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